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An  
Occupational Health  
Program for  
Hospital Employees

U.S. DEPARTMENT OF HEALTH, EDUCATION,  
AND WELFARE

Public Health Service



## Foreword

Preventive health services for employees provided at or through the workplace have long been viewed by the Public Health Service as a strong force for adult health. Such services have tremendous potential for increasing the well-being and efficiency of those individuals on whom our national economy and strength are most dependent.

In the hospital employee group, which helps minister to the health needs of the community, worker health and productivity achieve a new dimension. Employing over one million persons, hospitals account for almost two-thirds of the experienced civilian labor force in the health service industries.

In providing a sound preventive health program for his employees, the hospital administrator helps to conserve a vital national manpower resource while at the same time contributing to the performance of his staff.

HAROLD J. MAGNUSON, M.D.

*Chief, Occupational Health Program*

Washington, D.C.

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## **An Occupational Health Program for Hospital Employees**

The hospital is one of the best equipped organizations to carry out an occupational health program for its employees. It is in a unique position to realize many of the values of employee health services that have long been demonstrated in industry.

To encourage and facilitate the establishment of these services, the Joint Committee on Health Programs for Hospital Personnel of the American Hospital Association and the American Medical Association recently developed an outline of "Guiding Principles for an Occupational Health Program in a Hospital Employee Group." This outline and the "Scope, Objectives and Functions of Occupational Health Programs," issued by the American Medical Association, constitute the basic references for the hospital administrator interested in initiating or expanding an employee health program.

Supplementing these references, this booklet attempts to answer some of the questions the administrator may have, such as: What personnel will I need? How much room and what kinds of equipment are necessary? What records should be kept? What will it cost to operate the program?

While specific answers, applicable in every case, cannot be provided here, it is hoped that this booklet will assist the hospital administrator in resolving some of these very real and practical problems relating to employee health programs.

### **Administrative Relationships**

Experience has shown that an occupational health program functions best when it is directly

responsible to the top administration of the hospital.

Although the occupational health program should be a separate unit, working relationships should be developed with the emergency room, the out-patient department, and the personnel department to assure that the care of the employee is coordinated.

## **Personnel Needed**

### *Physicians*

The occupational health program should be conducted as a special assignment by a physician designated as the physician-in-charge or program medical director. The physician-in-charge should have preparation and experience in industrial or other forms of preventive medicine. Other physicians may serve as consultants or associates in the program. Particular caution is urged against the common practice of assigning a resident physician or intern unless there is close, frequent and interested supervision by a physician who can assure the continuity of direction so essential to the success of the program.

The full-time services of one physician, or equivalent, for an employee population of 2,000 are generally considered necessary for the effective administration of the program. The actual number of physicians assigned, full- or part-time, to the program can be estimated accordingly.

Some hospitals contract with a physician engaged primarily in outside private or industrial practice to direct and administer the program. While this arrangement has many advantages, special effort should be made to orient thoroughly the physician to the complexities of the hospital organization, the type of tasks performed by various personnel, and potentially hazardous exposures. The contract should define the agreement

on the scope of the services to be offered, and the hours and remuneration of the physician(s) retained.

### *Nurses*

The hospital should assign professional registered nurses to work with the physician in charge of the occupational health program. The selection of the nurse should be on the basis of personal competence, professional preparation, and experience in a community health agency or industrial medical department. The nurse should look to the physician in charge of the occupational health service for medical direction and to the director of nursing for professional guidance.

The number of full-time, professional registered nurses needed in the program may be computed as follows:

- 1 nurse up to 500 employees.
- 2 nurses up to 1,000 employees.
- 3 nurses up to 1,500 employees.
- 4 nurses up to 2,000 employees.

1 professional registered nurse for each additional 1,000 employees up to 5,000, and 1 nurse for each additional 2,000 employees. Additional nurses may be required under certain circumstances, such as for round-the-clock coverage.

### *Auxiliary Personnel*

Certain duties in the occupational health program can be provided most economically by clerical personnel, freeing the nurse to make a greater professional contribution, particularly in such areas as counseling and health teaching. Thus, while the nurse's professional work entails some record-keeping functions, other aspects of this activity should properly be assigned to clerical personnel.

As a practical measure, therapists, x-ray and laboratory technicians, and other related person-



nel already on the staff may be used in providing health services to employees. However, it should be clearly understood that the employees' health needs do not have a second class priority.

### Services Provided

As is true of programs in industry, the emphasis in the occupational health program should be on preventive services and the provision of a safe and healthful working environment. This focus is reflected in the minimum services of such a program which include:

1. Physical examination by a physician of the worker at the time of his employment to aid his placement in an assignment compatible with his capacities. To facilitate such placement, especially if rehabilitation may be involved, detailed job descriptions should be made available to the examining physician. The preplacement examination may be supplemented by x-ray, blood, urine and other studies.

2. Periodic examinations of the workers to detect any signs or symptoms of ill health. In some hospitals, all employees are offered comprehensive examinations regularly; in other hospitals, only selected groups receive full or partial study. Older workers should be considered in those groups examined more frequently. Periodic x-rays are usually indicated only for employees that may be exposed to infectious disease hazards.

3. Full treatment and care for all occupationally-caused disability.

4. Minor and emergency care for nonoccupationally related disability.

5. Health education and counseling to help employees maintain and improve their health.

6. Maintenance of complete and confidential health records to protect the employees as well as the interests of the hospital. The confidential

character of services given to employees needs to be stressed repeatedly to assure full utilization of the program.

7. Adequate and periodic inspections by trained personnel for the detection and correction of environmental hazards.

The following additional benefits and services are sometimes part of or are closely related to the hospital's occupational health program for employees:

1. Group insurance plans for hospitalization, surgical and income protection benefits with the hospital paying all or part of the premium costs.

2. Discounts to employees for "non-covered" hospitalization costs, drugs, and therapeutic and other services needed by the employees and their dependents.

3. Paid sick leave plans.

4. Regular safety and first-aid instruction programs.

5. Examination after absence because of sickness or injury.

6. Visiting nurse service.

7. Special examinations—vision, hearing, dental.

8. Maintenance of accident and illness records.

## **Facilities Required**

The hospital's occupational health program cannot properly function in the emergency room. Separate space should be assigned to it. Likewise, for ease of operation, the program should have its own basic equipment, despite its availability elsewhere in the hospital.

The space and equipment required for the hospital health unit may be considered to approximate the needs of a small plant dispensary, as outlined by the American Medical Association. The space requirements therefore can be computed at the rate

of one square foot per employee to a maximum of 500 square feet. The space is usually divided to provide separate rooms for examination, treatment, and waiting. The equipment recommended for a small plant dispensary includes:

### *General furnishings*

Sink	Foot pedal waste can
Instrument cabinet	Waste basket
Sterilizer	First-aid kits
Dressing table	Storage cabinets
Leg rest	Paper towel rack
Cot	Adhesive rack
Stretcher	Record file
Mirror, 10 x 12 inches	Scale

### *Instruments and supplies*

Scalpels	Assorted splints
Splinter forceps	Assorted catheters
Forceps	Loupe
Hemostatic clamps	Head mirror
Bandage scissors	Hand magnifying glass
Iris scissors	Syringes
Surgical scissors	Assorted hypodermic needles
Assorted bandages	Assorted surgical needles
Adhesive plaster	Needle holder
Cotton	Assorted jars and basins
Assorted gauze dressings	Test tubes
Assorted sutures	Safety razor and blades
Ice cap	Hot-water bottle
Crutches	Tourniquet

### *Physical examination equipment*

Stethoscope	Snellen vision chart
Sphygmomanometer	Wassermann tubes
Thermometer	Dynamometer
Otoscope	Tuning fork
Ophthalmoscope	Reflex hammer
Nose and ear speculums	Flesh pencil
Laryngeal mirror	Rubber gloves and finger cots
Spotlight	
Tongue depressors	

*Certain laboratory equipment has been omitted on the assumption that routine urinalyses and blood counts would be performed by the hospital's general laboratory services.*

## Records Maintained

The hospital makes an investment when it initiates and maintains an occupational health service for its employees. Management will therefore want to ensure that the records adopted are practical tools contributing to the maximum efficiency of the service.

*A Guide to Records for Health Services in Small Industries* was recently published by the American Conference of Governmental Industrial Hygienists. It may provide the hospital administrator with some useful leads as to what information should be considered for inclusion. Copies of the guide are available for \$1.00 from the Secretary-Treasurer, American Conference of Governmental Industrial Hygienists, % Occupational Health Field Headquarters, Public Health Service, U.S. Department of Health, Education, and Welfare, 1014 Broadway, Cincinnati 2, Ohio.

Any record system to be established will vary from hospital to hospital, depending on the services provided, personnel available, and extent of coordination with other departments. Modification and adaptation obviously will be required to fit the needs of the individual situation. Items proposed should be examined critically to determine whether they should be included in the record and report forms. This evaluation may be made by raising such questions as:

1. Is it important that this information be obtained? Why?
2. Can it be obtained with reasonable facility and accuracy? How? When? By whom?
3. Will it be used if recorded? How? When? By whom?

Further assistance and consultation may be obtained from State and local occupational health agencies, which are usually located in health de-

partments, and from the Council on Industrial Health of the American Medical Association.

### Cost of Program

There are so many variables in the costs that it is impossible to give definitive answers to this question. Some of the variables are: the local salary standards for physicians, nurses, and other personnel; the range of services offered and the extent of the hospital's commitment in each service; the gross outlay as compared to a net cost weighted in terms of saving in the workmen's compensation premium and reduced absenteeism (in fact, many employers say their employees' health programs do not "cost," but pay). The items charged to the basic or minimum services are:

1. Salaries and fees:
  - (a) Physician-in-charge.
  - (b) Physician consultant(s) or associate(s).
  - (c) Nurse(s).
  - (d) Auxiliary personnel—such as secretaries and clerks.
2. Supplies (such as bandages and medications).
3. Stationery and printing (forms, publications, reports).
4. Laundry.
5. Rent (such as space, electricity, water and heat).
6. Maintenance (such as repairs and painting).
7. Depreciation on permanent and capital equipment.
8. Miscellaneous (not included above).

For a rough rule-of-thumb estimate, experience has shown that, of the total cost of a basic health services program, 80 percent will be spent for sal-

aries and 20 percent (or one-fourth of the salary expense) for other items.

### *Salaries*

(1) Physician Services:		
<u>Number of employees</u>	×	Cost of full-time physician's
2,000		services per year-----
(2) Nursing Service:		
<u>Number of employees</u>	×	Cost of full-time nurse's serv-
500		ices per year-----
(3) Auxiliary Personnel:		
<u>Number of employees</u>	×	Cost of full-time services per
750		year-----

### *Other Costs*

¼ of total of above salaries-----	-----
Total-----	-----

The reported annual per capita costs of employee health services vary widely for the same reasons which account for the differences in total outlays. An additional factor found consistently is the decrease in per capita cost as the number of employees increases. A National Industrial Conference Board survey covering 131 companies showed an average annual expenditure for medical and health services of \$17.71 per employee. However, the average number of employees in the companies studied was 6,762. As a rule, business establishments and hospitals with fewer employees, and this includes most of them, will experience higher costs. In an industrial plant, with an employee population comparable to that of the average hospital, the per capita outlay might be two to four times higher. However, hospitals can save through the consultant, emergency room, x-ray, laboratory and other facilities at hand. Thus, they may be able to hold the per capita cost of a good basic occupational health program to approximately \$20 to \$25.

The expenditures should be evaluated in terms of the savings and benefits to the hospital. On the basis of industrial experience, absenteeism

may be reduced up to 50 percent. The cost of one day's absence is usually rated at  $1\frac{1}{2}$  times the daily wage. One study showed that, in nonprofit general hospitals with 250 or more employees, the compensation premium was 76 cents per \$100 payroll where there were no occupational health programs for employees and 57 cents in hospitals with programs. This difference of 19 cents represented 65 percent of the salary costs of the medical personnel assigned to the health programs.

### Recommended References

1. Joint Committee on Health Programs for Hospital Personnel of the American Hospital Association and the American Medical Association: Guiding Principles for an Occupational Health Program in a Hospital Employee Group. Reprinted as pamphlet from the *Journal of the American Medical Association*, 166: 777-779 (February 15) 1958. Available from Council on Industrial Health, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

2. Council on Industrial Health, American Medical Association: Scope, Objectives, and Functions of Occupational Health Programs. Reprinted as pamphlet from the *Journal of the American Medical Association*, 164: 1104-1106 (July 6) 1957. Available from Council on Industrial Health, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

3. Occupational Health Nurses Section, American Nurses Association: Functions, Standards, and Qualifications for Occupational Health Nurses. (August) 1958. Booklet available from American Nurses Association, 10 Columbus Circle, New York 19, New York.

4. American Association of Industrial Nurses: Recommended Qualifications . . . for a professional nurse working without nursing supervision

in an industrial medical service; Recommended qualifications . . . for a professional nurse working with nursing supervision in an industrial medical service; and Duties and responsibilities of the professional nurse in an industrial medical service. *American Association of Industrial Nurses Journal*, 2: 29 and 31 (June) 1955. Reprints available for 15 cents from American Association of Industrial Nurses, Inc., 170 East 61st Street, New York 21, New York.

5. Thompson, Doris M.: What companies pay for medical services, *Management Record*, 18: 132-138 (April) 1956.





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